

## **ABSTRACT OF THE DISCLOSURE**

A method for fabricating a semiconductor device includes the steps of implanting ions into a silicon carbide thin film (2) formed on a silicon carbide substrate (1), heating the silicon carbide substrate in a reduced pressure atmosphere to form a carbon layer (5) on the surface of the silicon carbide substrate, and performing activation annealing with respect to the silicon carbide substrate in an atmosphere under a pressure higher than in the step of forming the carbon layer (5) and at a temperature higher than in the step of forming the carbon layer (5).